UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,563	05/30/2006	Robert A. Emmett	71028-007	3833
	7590 02/20/200 VRIGHT PLLC	EXAMINER		
38525 WOODV	WARD AVENUE	WANG, JACK K		
SUITE 2000 BLOOMFIELD	HILLS, MI 48304-29	70	ART UNIT	PAPER NUMBER
			4154	
			MAIL DATE	DELIVERY MODE
			02/20/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/559,563	EMMETT ET AL.			
Office Action Summary	Examiner	Art Unit			
	JACK K. WANG	4154			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on <u>30 Mar</u> This action is FINAL . 2b)⊠ This Since this application is in condition for alloward closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) Claim(s) 11-20 is/are pending in the application 4a) Of the above claim(s) is/are withdrav 5) Claim(s) is/are allowed. 6) Claim(s) 11-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the ore Replacement drawing sheet(s) including the correction	vn from consideration. r election requirement. r. epted or b) objected to by the Edrawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
11) The oath or declaration is objected to by the Ex		, ,			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/19/2007.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te			

Application/Control Number: 10/559,563 Page 2

Art Unit: 4154

DETAILED ACTION

1. Claims 1-10 Cancelled.

2. Claims 11-20 Pending.

Drawings

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because drawing specified in the specification was not accompany with application. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zarybnicky, Sr. et al. (US Patent # 5,825,287) (already of record), and further in view of Korody (US Patent # 4,850,454).

Consider claim 11, Zarybnicky Sr. et al. clearly shown and disclose a brake pad wear indicator device having a connection for coupling the device to an external wear sensor (actuator) (26a-26f, Fig. 1A) associated with brake pads of vehicle brakes, a power source (inherent) for supplying power to the device and primary and secondary display devices (24, Fig.

Page 3

1B) operative to indicate wear of the pads, wherein said primary display device is operative to provide continuous display for indicating a wear condition; and where the secondary display device is operative to display at least one functionality display for the vehicle brakes. (Column 4

lines 17-33) except display one inner brake pad and one outer brake pad and providing a continuous differentiation wear display showing the difference in wear between the inner and

outer pad.

In the same field of endeavor, Korody teaches one inner brake pad and one outer brake pad and providing a continuous differentiation wear display showing the difference in wear between the inner and outer pad (Column 2 lines 20-47) for the benefit of providing the vehicle operator with an appropriate warning that the brake pads need to be serviced.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include display one inner brake pad and one outer brake pad and providing a continuous differentiation wear display showing the difference in wear between the inner and outer pad as shown in Korody, in Zarybnicky Sr. et al. device for the benefit of providing the vehicle operator with an appropriate warning that the brake pads need to be serviced.

Consider claim 12, Zarybnicky Sr. et al. clearly shown and discloses the brake pad wear indicator device wherein the primary display device has a continual wear display for a drum brake (Column 3 lines 37-42).

Consider claim 13, Zarybnicky Sr. et al. clearly shown and disclose the brake pad wear indicator device wherein the primary display device has a continual summary total wear display for the total of all wear (24, Fig. 1B) except the information on the inner pad and the outer pad.

In the same field of endeavor, Korody teaches the information on the inner pad and the outer pad (Column 2 lines 20-47) for the benefit of providing the vehicle operator with an appropriate warning that the brake pads need to be serviced.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the information on the inner pad and the outer pad as shown in Korody, in Zarybnicky Sr. et al. device for the benefit of providing the vehicle operator with an appropriate warning that the brake pads need to be serviced.

Consider claim 14, Zarybnicky Sr. et al. clearly shown and disclose the brake pad wear indicator device wherein the functionality display of the secondary display device is associated with a parking brake (Column 2 lines 35-40).

Consider claim 15, Zarybnicky Sr. et al. clealy shown and disclose the brake pad wear indicator device, wherein the functionality display of the secondary display device is associated with a brake adjustment status (Column 3 lines 18-20).

Consider claim 16, Zarybnicky Sr. et al. clearly shown and disclose the brake pad wear indicator device, wherein the functionality display of the secondary display device is associated with a brake failure state (Column 2 lines 59-62).

Consider claim 17, Zarybnicky Sr. et al. clearly shown and disclose the brake pad wear indicator device including a housing (control box 22) (Column 11 lines 52-54).

Consider claim 18 and 19, Zarybnicky Sr. et al. teaches similar invention except the brake pad wear indicator device, including a first function button (switch) connection to the electronic processing unit operative to activate or to invoke the display of the first display device and a second function button connected to the electronic processing unit operative to activate to

Application/Control Number: 10/559,563 Page 5

Art Unit: 4154

invoke the display of the second display device. Although Zarybnicky Sr. et al. does not specifically disclose a first function button and second function button. He does disclose a display contains plurality information related to brake conditions (24, Fig. 1B). Since Zarybnicky Sr. et al. device are capable of display the information relate to the claimed invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use well know switching scheme such as first button and second button to display the desired information, which the selection of switch are design choice for the particular application.

Consider claim 20, Zarybnicky Sr. et al. clearly shown and disclose the brake pad wear indicator device wherein the displays of the first display device and/or the displays of the second display device may be activated concurrently to display at the same time (24, Fig. 1B).

Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Kinast (US Patent # 3,825,891) "Brake-lining wear-indicator".
 - b. Leiber et al. (US Patent # 6,512,453 B1) "Motor vehicle ABS-integrated brake pad wear indication apparatus".
 - c. Ohbe et al. (Pub # US 2001/0009212 A1) "Brake lining wear detection apparatus".
 - d. Kazuro et al. (US Patent # 5,692,585) "Brake pad with a wear indicator".
 - e. Miller (Pub # US 2003/0121732 A1) "Method of determining brake wear".

Application/Control Number: 10/559,563 Page 6

Art Unit: 4154

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack K. Wang whose telephone number is 571-272-1938. The examiner can normally be reached on M-F 7:30AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on 571-272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JKW/

/Angela Ortiz/

Supervisory Patent Examiner, Art Unit 4154